

ABSTRACT

A gas discharge lamp includes a base configured to receive electrical power from a power source and a high frequency ballast electrically connected to the base and configured to convert the electrical power to a high frequency AC waveform for driving a gas discharge tube. The gas discharge tube is configured to receive the high frequency AC waveform and emit UV light by passing the high frequency AC waveform through a mixture of gases contained within the gas discharge tube and to emit UV photons in response. A visible light emitting surface has a glass envelope of different geometry than the gas discharge tube and a phosphor coating is placed on the inside of the glass envelope. The glass envelope seals a volume around the gas discharge tube that is at least partially evacuated.